VIRGINIA HENDERSON'S NATURE OF NURSING THEORY
AND QUALITY OF LIFE FOR THE OLDER ADULT

A DISSERTATION
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To the Provost of the Graduate School:

I am submitting herewith a dissertation written by Ray Ann Hargrove-Huttel titled "Virginia Henderson's Nature of Nursing Theory and Quality of Life for the Older Adult." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Nursing.

Helen A. Buss
Major Professor

We have read this dissertation and recommend its acceptance:

Helen A. Buss
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Dean, College of Nursing

Accepted

Provost of the Graduate School
Words cannot express my heartfelt thanks to Dr. Helen Bush, dissertation chairman, role-model, and friend, whose educational philosophy, continuous support, understanding, and genuine interest facilitated my personal and professional growth and development. I am also grateful for the academic influence of Drs. Margie Johnson, Margaret Beard, and Peggy Drapo. The computer and statistical expertise of Dr. Lynn Moore, and the editorial and clerical expertise of Marion Smalley were invaluable. A very special thanks to the members of the American Association of Retired Persons who so willingly participated in this study.

I am dedicating this endeavor to my family, for without their continuous understanding, love, and support my doctoral degree would not have been possible. Thank you seems like such a small thing to say to my mother, Nancy Hargrove, who is always there when I need her. A very special debt of gratitude is owed to my sister, Gail Hargrove, who gave so freely of her time over the last 4 years so that my dream could come true. I would like to thank my sister, Debra Hargrove, for always running errands in Denton so that I would not have to make the trip. To my
husband, Bill, and my children, Teresa and Aaron, a very special thanks for they are my reason for living. I would also like to dedicate this study to my father, the late T/Sgt Leo Ray Hargrove, who, at a very early age instilled in me that I could do and be anything I wanted if I worked hard enough.
A descriptive correlational study was conducted to determine if attainment of Virginia Henderson's (1966) basic care needs can be equated with a quality of life for the older adult. A model entitled "Quality of Life for the Older Adult" was developed utilizing Henderson's (1966) nature of nursing theory as the theoretical framework.

The researcher developed instrument, Henderson's Basic Nursing Care Needs Opinionnaire, was utilized to measure attainment of Henderson's 14 basic care needs. Internal consistency reliability was established for the instrument with a Cronbach alpha of .97. Ferrans and Powers' (1985) Quality of Life Index was utilized to identify a quality of life for the older adult. The study included 174 subjects obtained from rural community American Association of Retired Persons meetings.

The findings of this study suggested that attainment of Henderson's basic care needs can be equated with a quality of life for the older adult. The hypothesis which stated that there was no significant relationship between
the level of attainment of Henderson's basic nursing care needs and the level of quality of life for the older adult was rejected and the alternate was accepted. The second null hypothesis was also rejected and a significant relationship was found between quality of life and the researcher identified concepts of perceived health status, social activity level, and control over changing lifestyle. The third hypothesis stated there was no significant difference between the self-reported demographic variables and quality of life for the older adult. Significant differences were found between older adults who live alone and older adults who live with their spouse and older adults who had a yearly income of less than $20,000 and those individuals who received a yearly income of greater than $30,000. No significant difference was found between males and females and quality of life for the older adult.

Social activity level accounted for 38% of the variance for the quality of life for the older adult. Social activity level and perceived health status accounted for 40% of the variance for the quality of life for the older adult.
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CHAPTER I

INTRODUCTION

Campbell (1981) quoted the late President Lyndon B. Johnson as saying in 1964:

The task of the Great Society is to ensure our people the environment, the capacities, and the social structures which will give them a meaningful chance to pursue their individual happiness. Thus the Great Society is concerned not with how much, but with how good—not with the quantity of goods, but the quality of our lives. (p. 16)

One of the most dramatic demographic changes of the 20th century is the increase in the number of Americans reaching old age. This increase presents a great challenge to the American healthcare system and will present even greater challenges in the future as the proportion of those over age 65, and especially those over 75, continues to increase (Edel, 1986).

Of all the healthcare providers educated to meet the needs of society, nurses constitute the group with the greatest potential for meeting the healthcare needs of the older adult (Edel, 1986). In fact, in its position paper on healthcare of the aged, the World Health Organization (1980) recommended that nurses be the primary healthcare workers responsible for providing comprehensive care for
the older adult and their families, and that these caring services be integrated into the general healthcare system.

In providing comprehensive care, not just the quantity but the quality of life for the older adult must be addressed with emphasis on nursing assessment, diagnosis, planning, intervention, and evaluation. Virginia Henderson (1971) stated "respect for life and health as a quality of life is every person's business and his/her most important business" (p. 33) Miller (1983) pointed out that the concept of quality of life contains no consistent or universal meaning other than a general construct: to maximize satisfaction by living life to its fullest and functioning to the optimum of one's capability in all stages of life. According to Erikson (1963), the developmental task of the older adult is to develop ego integrity, which he defined as a sense of satisfaction with life and its meaning and a belief that life is fulfilling and successful.

At the present time, quality of life research is atheoretical. What theory there is tends to be a description of life in modern industrial society. Differences in quality of life regardless of place and time are not explained in a body of propositions (Schuessler & Fisher, 1985). Theory may be inductively inferred as well
as deductively derived. Moreover, there is an interplay between statistical fitting and theorizing; a good fit suggests a theory which may be tested and revised as required (Schuessler & Fisher, 1985).

Virginia Henderson's (1966) nature of nursing theory is a theory that can be tested and revised as required to determine a relationship to quality of life for the older adult. Gehrmann (1979) stated, "if one agrees that the purpose of quality of life research is to improve people's 'quality of life', then there is an urgent need for empirically testing the quantifiability and measureability of quality of life concerns" (p. 74).

Problem of Study

The problem of the study was to determine if a relationship exists between the level of attainment of Henderson's (1966) basic nursing care needs and the level of quality of life for the older adult.

Purpose of the study

The purpose of the investigation was: to perform statistical tests on empirical data in an attempt to establish support that Henderson's (1966) nature of nursing theory can be utilized as a theoretical base to identify a level of quality of life for the older adult.
Justification of the problem

According to Campbell (1981), the term "quality of life" entered the American vocabulary between World War II and Lyndon Johnson's Great Society Program. It was used to emphasize that 'the good life' required more than simple material affluence. Since then, quality of life has become an important concern in healthcare and social policy. However, the issue of quality of life is complicated by the problems encountered in defining and measuring it (Ferrans & Powers, 1985). The difficulty in attempting to assess the term "quality of life" has resulted in a variety of concepts, definitions, theories, and measurements, most of which are related either semantically or empirically, but some of which are culturally or subculturally biased (Adams, 1971). Life satisfaction, individual well-being, happiness, morale, successful aging, adjustment, adaptation, and positive self-image are terms used synonymously with "quality of life" (Adams, 1971).

Theories about quality of life attempt to describe the cognitive, affective, and symbolic processes through which individuals assess, determine, and experience the quality of their lives. Quality of life theories differ in the centrality they accord to cognition, affect, and social interaction (Schuessler & Fisher, 1985). For example,

Nurses use theory in the form of concepts, principles, processes, and the like, to sharpen their observations and to understand the phenomena within the domain of nursing practice. Such understanding precedes and serves as a basis for determining nursing actions to be taken. (p. 11)

A nursing theory concerning quality of life for the older adult should address the physical, psychological, and sociocultural aspects of the individual.

In formulating a theory of quality of life, most specialists agree that the term quality has the same meaning as grade, and that grade ranges from high to low, from better to worse (Schuessler & Fisher, 1985). Therefore, one reads statements such as "my quality of life is improving", "my quality of life is worse than yours" and "my quality of life is high." In empirical studies of quality of life, there is a continual shifting back and forth between the objective side of life (food and shelter) and the subjective side of life (attitudes and feelings) (Schuessler & Fisher, 1985).

Professional nurses are involved in helping clients meet the challenges of daily living. Interventions are
commonly centered on challenges related to physical care and continuously evaluated; thus the quality of care is constantly monitored (Holmes, 1985). It is equally important to understand those factors which help to maintain the quality of life (Holmes, 1985). To ensure quality of life for the older adult, the nursing profession must attempt to establish and identify a theoretical framework on which to base nursing assessments, nursing diagnoses, nursing care plans, nursing interventions, and nursing evaluations for the care of the older adult.

Henderson's (1966) theoretical framework was empirically tested to support the concept that attainment of Henderson's (1966) basic nursing care needs can be equated to a level of quality of life for the older adult. Henderson's (1966) basic nursing care needs include the physical, psychological, and sociocultural needs of the individual. Three subconcepts: (a) perceived health status, (b) social activity, and (c) control over changing lifestyle were identified by the researcher from Henderson's (1966) basic nursing care needs (Figure 1).

Research on the older adult reveals that among all elements of an older person's life situation, health is the most strongly related to subjective well-being (Larson, 1978). In an extensive review of the research literature,
Quality of Life

Perceived Health Status
- Ability to breathe normally
- Ability to eat & drink adequately
- Ability to eliminate body wastes
- Ability to sleep and rest
- Ability to keep body clean and well-groomed and protect the integument
- Ability to maintain body temperature within normal limits by adjusting clothing and modifying environment
- Ability to move and maintain desirable postures
- Ability to select suitable clothes, dress and undress

Social Activity

Control Over Changing Lifestyle
- Ability to learn, discover, or satisfy the curiosity that leads to normal development and health, and use available health facilities
- Ability to avoid dangers in the environment and avoid injuring others
- Ability to communicate with others in expressing emotions, needs, fears, or opinions

Ability to work in such a way that there is a sense of accomplishment

Ability to play or participate in various forms of recreation

Ability to worship according to one's faith

Figure 1. Quality of life for the older adult.
Wilson (1967) concluded that one of the most consistent findings is the direct relationship between happiness with life and social activity/participation. The phenomenon of loss of control is the individual's expectation that his/her behavior cannot produce the outcome or reinforcement he/she seeks (Lubkin, 1986). Miller (1983) defined loss of control or powerlessness as a perception that one's own actions will not affect an outcome. The American social structure tends to stereotype chronically ill or aged persons by establishing and perpetuating the powerless phenomenon. Older individuals are sometimes considered incompetent to work gainfully and at times are cast aside from the mainstream of social life (Lubkin, 1986).

If empirical data can be obtained to support the concept that attainment of Henderson's (1966) basic nursing care needs will identify a level of quality of life for the older adult, then nursing assessments, nursing diagnoses, nursing care plans, nursing interventions, and nursing evaluations can be further tested to support Henderson's (1966) nature of nursing theory. The study determined if there is a relationship between the level of attainment of Virginia Henderson (1966) basic nursing care needs and quality of life for the older adult.
Theoretical Framework


> the unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to a peaceful death) that he/she would perform unaided if he/she had the necessary strength, will or knowledge. And to do this in such a way as to help him/her gain independence as rapidly as possible. (p. 15)

Henderson (1966) contended that the professional nurse is, and should legally be, an independent practitioner and able to make independent judgements regarding nursing care. The professional nurse is the authority on basic nursing care. Henderson (1966) defined nursing as helping the patient with the following activities or providing conditions under which the patient can perform them unaided:

1. Breathe normally.
2. Eat and drink adequately.
3. Eliminate body wastes.
4. Move and maintain desirable postures.
5. Sleep and rest.
6. Select suitable clothes - dress and undress.
7. Maintain body temperature within normal range by adjusting clothing and modifying the environment.
8. Keep the body clean and well groomed and protect the integument.

9. Avoid danger in the environment and avoid injuring others.

10. Communicate with others in expressing emotions, needs, fears, or opinions.

11. Worship according to one's faith.

12. Work in such a way that there is a sense of accomplishment.

13. Play or participate in various forms of recreation.

14. Learn, discover, or satisfy the curiosity that leads to normal development and health and use the available health facilities (p. 16).

Henderson (1966) viewed health in terms of the patient's ability to independently perform the 14 components of nursing care. She determined it is "the quality of health rather than life itself, that margin of mental and physical vigor that allows a person to work most effectively and to reach his/her highest potential level of satisfaction in life" (Henderson & Nite, 1978 p. 122).

Henderson (1966) defined environment as: "the aggregate of all the external conditions and influences affecting the life and development of an organism" (Webster, 1961). The mind and body are inseparable. The patient and family are
viewed as an unit (Demeester, Lauer, & Neal, 1986). Henderson (1964) viewed the patient as an individual who requires assistance to achieve health and independence or to a peaceful death.

Henderson (1966) did not directly cite the underlying assumptions of her nursing theory but DeMeester et al. (1986) derived major assumptions from Henderson's publications and collaboration with her (Exhibit 1). Three theoretical assertions can be identified from Henderson's (1966) nature of nursing theory: (a) the nurse is a substitute for the patient, (b) the nurse is a helper to the patient, and (c) the nurse is a partner with the patient (DeMeester et al., 1986).

In times of serious illness, the professional nurse is seen as a "substitute for what that patient lacks to make him/her complete, whole, or independent by the lack of physical strength, will, or knowledge" (Henderson, 1964, p. 63). Henderson (1966) further identified the professional nurse as being

temporarily the consciousness of the unconscious, the love of life for the suicidal, the leg of the amputee, the eyes of the newly blind, a means of locomotion for the infant, knowledge and confidence for the young mother, the mouthpiece for those too weak or withdrawn to speak, and so on. (p. 16)

The professional nurse is a helper to the patient during convalescence. Henderson (1966) stated
Nursing
The nurse has a unique function to help well or sick individuals.

The nurse functions as a member of a medical team.

The nurse functions independently of the physician, but promotes his/her plan, if there is a physician in attendance.

The nurse is knowledgeable in both biological and social sciences.

The nurse can assess basic human needs.

The 14 components of nursing care encompass all possible functions of nursing.

Person (Patient)
The person must maintain physiological and emotional balance.

The mind and body of the person are inseparable.

The patient requires help toward independence.

The patient and his/her family are a unit.

The patient's needs are encompassed by the 14 components of nursing.

Health
Health is a quality of life.

Health is basic to human functioning.

Health requires independence and interdependence.

Promotion of health is more important than care of the sick.

Individuals will achieve or maintain health if they have the necessary strength, will, or knowledge.

Environment
Healthy individuals may be able to control their environment, but illness may interfere with that ability.

Nurses should have safety education.

Nurses should protect patient from mechanical injury.

Nurses should minimize the chances of injury through recommendations regarding construction of buildings, purchase of equipment, and maintenance.

Doctors use nurses' observations and judgements upon which to base prescriptions for protective devices.

Nurses must know about social customs and religious practices to assess dangers.

"Independence is a relative term. None of us are independent of others, but we strive for a healthy interdependence, not a sick dependence" (p. 64). As partners, the professional nurse and patient together formulate a nursing care plan. The nurse must be able not only to assess the patient's needs, but also those conditions and pathologic states that alter them. Henderson (1966) asserted that professional nurse must "get inside the skin of each of his/her patients in order to know what he/she needs" (p. 63). The needs must then be validated with the patient. In Henderson's (1966) theory of nursing, the professional nurse helps the patient perform activities to maintain health, to recover from illness, or to aid in a peaceful death. Interventions are individualized, depending on the physical, psychological, sociocultural, and socioeconomic conditions of each and every patient. Promoting the independence and increasing the quality of life and health of the patient, sick or well, is the primary concern of the professional nurse.

The researcher developed a quality of life model utilizing Henderson's (1966) Nature of Nursing Theory (Figure 2). The schematic representation of the theory of quality of life for the older adult places each of Henderson's 14 basic care needs under one of the three
subconcepts of perceived health status (PHS), social activity level (SAL), and control over changing lifestyle (COCL). An opinionnaire was developed by the researcher to assess the perception of the older adult and his/her ability to independently perform Henderson's basic care needs (Appendix A).

The three subconcepts appear to be related to the quality of life for the older adult. The review of literature supports that perceived health status, social activity, and control over changing lifestyle are predictors of quality of life for the older adult. The difficulty with the identified subconcepts is that each study defines and identifies these concepts in a different way. In the model generated by the researcher, the subconcepts are defined by the perception of the individual's ability to independently perform Henderson's 14 basic nursing care needs. Perceived health status is represented by the individual's ability to (a) breathe normally (BREATHE), (b) eliminate body wastes (ELIMIN), (c) sleep and rest (SLEEP), (d) maintain body temperature within normal range by adjusting clothing and modifying the environment (TEMP), (e) eat and drink adequately (EAT/DRINK), (f) move and maintain desirable postures (MOVE), (g) select suitable clothes—dress and undress (DRESS),
Figure 2. Model of quality of life for the older adult.
(h) keep the body clean and well groomed and protect the integument (GROOM). Social activity level is represented by the individual's ability to (a) work in such a way that there is a sense of accomplishment (WORK), (b) worship according to one's faith (FAITH), and (c) play or participate in various forms of recreation (PLAY). Control over changing lifestyle is represented by the individual's ability to (a) learn, discover, and satisfy the curiosity that leads to normal development (LEARN/DISC); (b) avoid dangers in the environment and avoid injuring others (DANGER); and (c) ability to communicate with others in expressing emotions, needs, fears, or opinions (COMMON).

The three subconcepts are positively interrelated and are dependent upon each other. The propositional statements are: (a) the greater the perceived health status the greater amount of social activity the individual engages in, (b) the greater the perceived health status the greater the control over changing lifestyle, (c) the greater the social activity the greater the control over changing lifestyle, and (d) the greater the control over changing lifestyle, the greater the perceived health status.

Quality of life for the older adult is directly related to the individual's perception of his/her ability
to independently perform Henderson's (1966) 14 basic nursing care needs. The prepositional statement being tested in this research was: The greater the individual's perception in independently performing Henderson's (1966) 14 basic nursing care needs, the greater the individual's perception of a high quality of life. This is depicted in the schematic representation of the quality of life for the older adult (Figure 2) utilizing Henderson's (1966) nature of nursing theory.

Assumptions

For the purposes of the study, the following assumptions were made:

1. Attitudes and feelings can be measured by a self-administered paper and pencil opinionnaire.
2. Level of basic needs and quality of life varies among the older adult.
3. Research participants are honest.

Hypotheses

The hypotheses of the study were as follows:

1. There is no significant relationship between the level of attainment of Henderson's (1966) basic care needs, as measured by Henderson's Basic Nursing Care Needs Opinionnaire and the level of quality of life, as measured
by the Quality of Life Index (Ferrans & Powers, 1985), for
the older adult.

2. There is no significant relationship between
quality of life and the three major concepts, perceived
health status, social activity level, and control over
changing lifestyle identified in Henderson's (1966) basic
care needs for the older adult.

3. There is no significant difference between the
self-reported demographic variables and quality of life in
the older adult.

Definition of terms

The following definitions were established for the
study:

1. The older adult--persons who state they are the
chronological age of 50 or older.

2. Level of attainment of Henderson's (1966) basic
nursing care needs--a perception as measured by the
researcher developed Henderson's (1966) Basic Nursing Care
Needs Opinionnaire: an 18-item opinionnaire asking the
subject about his/her ability to perform the identified
basic nursing care needs (Appendix A).

3. Quality of life--as measured by the Quality of Life
Index (Ferrans & Powers, 1985): a 64-item opinionnaire that
assesses both the satisfaction and importance of an
individual in the areas of healthcare, physical health and functioning, marriage, family, friends, stress, standard of living, occupation, education, leisure, future retirement, peace of mind, personal faith, life goals, personal appearance, self-acceptance, general happiness, and general satisfaction (Appendix B).

4. Perceived health status--as measured by the individual's perception of his/her ability to independently perform items 1 through 10 on Henderson's Basic Nursing Care Needs Opinionnaire.

5. Social activity level--as measured by the individual's perception of his/her ability to independently perform items 14, 15, and 16 on Henderson's Basic Nursing Care Needs Opinionnaire.

6. Control over changing lifestyle--as measured by the individual's perception of his/her ability to independently perform items 11, 12, 13, 17, and 18 on Henderson's Basic Nursing Care Needs Opinionnaire.

Limitations

The following limitation was recognized for the study:

The use of an opinionnaire in collecting data is subject to the question of validity and accuracy of self-reports (Polit & Hungler, 1983).
Summary

The study determined if there is a relationship between the level of attainment of Henderson's (1966) basic care needs and the level of quality of life for the older adult. The expected outcome of the study was given in the form of a three null hypotheses. Henderson's (1966) nature of nursing theory was discussed and used as the theoretical framework of this study. The empirical data obtained from the study should assist in determining the usefulness of Henderson's (1966) nature of nursing theory for use with the older adult.
CHAPTER II

REVIEW OF LITERATURE

Quality of life emerged as a research field around 1960 (Schuessler & Fisher, 1985). Often cited as being the forerunners to the emergence of quality of life as a separate area of research are The Report Of The President's Commission On National Goals (1960) and Bauer's (1966) work on the secondary effects of national space programs in American society. The year 1960 has been arbitrarily identified as the beginning of quality of life research. The concept "quality of life" appeared for the first time in 1979 as an index term in Sociological Abstracts. The concept itself has a long history with concern about the good life being probably as old as civilization (Schuessler & Fisher, 1985). Throughout history, people have written about "the good life". While the details of their descriptions of the good life may have differed, probably all would have agreed that persons strive for material and spiritual well-being (George & Bearon, 1980). In many ways, "quality of life" is the modern counterpart to the notion of the good life. Like the good life, quality of life is an attractive and appealing subject, bringing to
mind personal images of pleasure and contentment as well as riches (George & Bearon, 1980).

Social scientists have failed to provide consistent and concise definitions of quality of life. The task is difficult, for definitions of life quality are largely a matter of personal or group preference: different people value different things (George & Bearon, 1980). In terms of scientific inquiry, investigations involving quality of life are done under various labels/terms. A review of the literature yields such terms as "life satisfaction", "happiness", "psychological well-being", "morale", and "successful aging" as being equated with quality of life (Burgess & Cottrell, 1939; Fengler, 1984; Gibson, 1986-87; Havighurst, 1961; Horley, 1984; Larson, 1978; Lawton, Kleban, & diCarlo, 1984; Longino & Cary, 1982; Palmore, 1979). The studies are concerned with identifying and determining what characteristics are associated with quality of life.

In the review of literature for the present study, research under any of the above mentioned terms was reviewed. Research pertaining to "quality of life" was reviewed whether it was concerned with the older adult or not. Because Henderson's (1966) theoretical framework is the basis of the present study, the three sub-concepts
identified in Henderson's (1966) 14 basic nursing care needs were reviewed: (a) perceived health status, (b) social activity, and (c) control over of changing lifestyle.

Quality of Life Research

Review of the literature showed that research consists of attempts to define, measure, and develop theories concerning quality of life. Numerous attempts have been made to provide a definition of quality of life. In empirical studies of quality of life, a continual shifting back and forth is found between the objective side of life (food and shelter) and the subjective (attitudes and feelings). Studies investigating the subjective side of quality of life included mental states of a person's well-being, his/her satisfaction or dissatisfaction with life (Andrew & McKennal, 1980; Horley & Little, 1985; Martinson, Wilkening, & Linn 1985) and happiness or unhappiness with life (Michalos, 1982). Typically, however, environmental conditions are seen as fostering or facilitating quality of life, and not as constituting or creating it (Carp & Christensen, 1986; Schuessler & Fisher, 1985). At the present time, research has failed to yield a universal definition of quality of life. Research addresses global satisfaction (general satisfaction or happiness) and
domain-specific satisfaction (satisfaction about something in particular) (Schussler & Fisher, 1985). Campbell, Converse, and Rodgers (1976) defined quality of life as a general sense of well-being, but preferred to study domain-specific satisfactions because of the greater relevance for public policy. The trend to limit quality of life to a particular domain is reflected in such phrases as the quality of urban life (Rodgers, 1981), the quality of work life (Rodgers, 1977), and the quality of family life (Ross & Duff, 1982).

Studies investigating the quality of life of specific populations and locations are also found in the literature. Michalos (1982) investigated the satisfaction and happiness of senior citizens in rural Ontario; Shin, Ahn, Kim, and Lee (1983) studied the environmental effects of perceptions of life quality in Korea; and Wilkening and McGranahan (1978) investigated the correlates of subjective well-being in northern Wisconsin. Studies researching a specific population include Burckhardt's (1985) research on the impact of arthritis on quality of life; Magilvy's (1985) investigation on quality of life of hearing-impaired older women; Fletcher's (1981) study concerning the quality of life of elderly women; and Irwin, Gottlieb, Kramer, and

**Measuring Quality of Life**

Research which attempts to measure quality of life encounters the same difficulty as when defining quality of life, that of subjective versus objective measures. Measures of quality of life are often called quality of life indicators because the concept is not susceptible to direct measurement and because quality of life research and the social indicators movement have a common origin (Schuessler & Fisher, 1985). A distinction is made between objective and subjective indicators of quality of life. Observable environmental conditions such as per capita income or average daily temperature are objective indicators and subjective indicators include responses to survey items measuring feelings of satisfaction, happiness, or related attitudes. Subjective measures of quality of life have originated mainly from sociology and social psychology, and within these fields they appear to have received relatively more attention in the last ten years than objective measures (Schuessler & Fisher, 1985).

The review of literature revealed attempts to develop tools to measure quality of life dating back to the 1950s. The Chicago Attitude Inventory Scale (Cavan, Burgess,
Havigurst, & Goldhammer, 1951) is an inventory of activities and attitudes for older people. It consists of 56 attitudinal statements in eight categories: (a) health, (b) friends, (c) work, (d) economic security, (e) religion, (f) feeling of usefulness, (g) happiness, and (h) family. Neugarten, Havigurst, and Tobin (1961) conceived life satisfaction as a construct which encompasses five underlying dimensions of psychological well-being: (a) zest, (b) resolution and fortitude, (c) congruence between desired and achieved goals, (d) positive self-concept and (e) mood tone.

Milbrath and Sahr's (1974) scale was one of the first of its kind to measure how people feel about their environment. Jones and Pierce (1977) felt that social and economic activities may differ in the happiness they bring and developed a tool that weights activity-specific happiness scores by time spent in activity and combined these weighted scores into a single index. Lui (1976) developed a quality of life index using objective indicators drawn from U.S. Census Statistics for 1970. Five major domains were identified: (a) economic, (b) political, (c) environmental, (d) health and education and (e) social. A complex system of weighting was used to combine individual indicators into domain-specific
subindexes and combined these into an overall quality of life index.

Campbell, Converse, and Rodgers (1976) devised a questionnaire for measuring general affect. Subjects are instructed to characterize their lives at present using eight semantic differential scales: boring-interesting; miserable-enjoyable; hard-easy; useless-worthwhile; lonely-friendly; empty-full; discouraging-hopeful; tied down-free; disappointing-rewarding; and doesn't give me a chance-brings out the best in me. Scores based on these items have a fairly high reliability (0.89) and are moderately correlated (0.52) with global measure of happiness and with a global measure of satisfaction (0.55).

Sociologists, psychologists, economists, and other social scientists have researched instruments for measuring quality of life for over 30 years. The nursing profession is now becoming involved in measuring, defining, and theorizing about quality of life (Padilla et al., 1983). Ferrans and Powers (1985), two nurses from the University of Illinois at Chicago, developed and investigated the psychometric properties of a Quality of Life Index that consisted of two sections: one section measured satisfaction with various domains of life and the other
section measured the importance of the domain to the subject. Their instrument is utilized in this study.

Padilla and Grant (1985) conducted a research testing a multidimensional instrument for measuring quality of life. The results showed how satisfaction with nursing care and personal control act as cognitive mediators of self-worth, which then impacts on dimensions of quality of life. The researchers offered a model that describes how quality of life works as an outcome variable. They further utilized this model and made predictions of how nursing interventions may directly or indirectly impact on quality of life.

Theorizing About Quality of Life

Theories about quality of life attempt to describe the cognitive, affective, and symbolic processes through which individuals assess, determine, and experience the quality of their lives. They differ in the centrality they accord to cognition, affect, and social interaction. Each theory proceeds from its particular view of the individual and society (Schuessler & Fisher, 1985).

Psychological man, or the self, experiences a sense of well-being when the needs he feels are appreciably reduced. Ziller (1974) presented a phenomenological theory of quality of life that is, in his judgement, amenable to scientific research. In his view, quality of life inheres in self-appraisal, which in turn inheres in the interaction of self with significant others. Self-regard, rather than satisfaction, is the key outcome in such interaction.

Economic theory stresses the processes by which individuals rationally allocate resources to meet their needs, thereby producing utility or satisfaction. Characteristics of economic theories include resources allocation, maximum utilization of resources and the development of models to maximize the distribution of resources (Schuessler & Fisher, 1985). Lui (1976) attempted to integrate "the quality of life concept into the general framework of production theory in conventional microeconomic analyses" (p. 39). Juster, Courant, and Dow (1981) sought "to bridge the gap between the way in which economists have thought about material well-being and the way other social scientists have thought about social indicators" (p. 23).

The ecological approach to quality of life research is eclectic in that it views both social and physical worlds
as one, or defines one world with physical and social aspects. Bubolz, Eicher, Evers, and Sontag (1980) viewed quality of life as an element in a general process in which each element is subject to the influence of every other element. They supply an empirical example to illustrate the ecological approach that focuses on the interconnectedness of things, both animate and inanimate. Milbrath (1982) perceived that the individual and quality of life alternate as input and output. If the sequence is arbitrarily started with individual as input and quality of life as output, the quality of life subsequently becomes input, changes occur in the environment, and the latter subsequently alters quality of life and so on. In this cyclical manner quality of life influences itself over time.

Gerontologists theorize about quality of life. Two contrasting theories of successful aging (a term used interchangeably with quality of life) are the activity theory and the disengagement theory of aging. Cummings and Henry (1961) hypothesized that decreased social interaction is interpreted as a process characterized by mutuality; one in which both society and the aging person withdraw, with the aging individual acceptant, perhaps even desirous, of the decreased interaction. The activity theory was given
its name by the disengagement theorists, who developed their theory in conscious and explicit opposition to the activity theory (Decker, 1980). Within the activity theory people should maintain the activities and attitudes of middle age as long as possible and find substitutes for the activities which they must give up substitutes for work when they must retire, substitutes for clubs and associations they must give up, and substitutes for friends and loved ones whom they lose by death or other reasons (Havighurst, 1961).

Perceived Health Status and the Older Adult

Health is typically defined as positive well-being, both physical and emotional, and is conceived as being more than absence of disease. Physical well-being is a necessary part of the foundation upon which more subjective dimensions of life quality rest. Physical well-being is even more important for older persons than for the rest of the population because it is much more likely to be problematic (George & Bearon, 1980). In spite of the importance of health to quality of life, there is no simple or straightforward way to define or measure health.

Among all the elements of an older person's life situation, health is the most strongly related to
subjective well-being. Individuals who are sick or physically disabled are much less likely to express contentment about their lives (Larson, 1978). Perceived health has consistently emerged as being directly associated with satisfaction (Edwards & Klemmack, 1973; Gibson, 1986-1987; Hoeffer, 1987; Laborde & Powers, 1985; Larson, 1978; Lowry, 1984; Martinson, Wilkening, & Linn, 1985; Palmore & Luikert, 1972; Palmore, 1979; Saur, 1977; Spreitzer & Snyder, 1974; Wamboldt & Tamlyn, 1986).

Palmore and Luikert (1972) researched changes in activities and attitudes among 127 persons over a 10-year period. They concluded that life satisfaction in middle-age and older is more strongly related to perceived health and secondly to involvement in social organizations. Palmore and Luikert (1972) suggested that a person's perception of his/her health is mainly a function of his/her overall optimistic or pessimistic view of life. This explains its high association with life satisfaction.

Sauer (1977) examined various predictors of life satisfaction. The data consisted of a random sample of low-income elderly individuals residing in Philadelphia. The sample included 722 black and 514 white subjects. Variables included in the study were life satisfaction, socioeconomic status, social interaction, age, sex, health,
marital status, social participation, and solitary activity. The results of the study were that health and participation in solitary activities were the two significant predictors of life satisfaction for the blacks. For whites, the predictors of life satisfaction were health, solitary activity, and interaction with family.

Kozma and Stones (1983) interviewed 200 urban, 200 rural, and 200 institutionalized Newfoundlanders over 64 years of age at two points in time, 18 months apart. For urban and institutionalized persons the main independent predictors of happiness in both phases were housing satisfaction, health, activities, and changes in life events. For rural individuals, only health and marital status remained consistent predictors for both phases.

Martinson, Wilkening, and Linn (1985) examined the relationship between negative life change self-reports and indices of health status and life satisfaction. The data came from a survey of 1,423 northwestern Wisconsinites interviewed in 1974 by the Wisconsin Survey Research Laboratory. Martinson et al. (1985) concluded that negative life change is related to life satisfaction and to the measures of health status for all age categories. Negative life change seems to be more strongly associated with health problems for older persons compared to younger
ones. The findings indicated that self-reports of negative life changes were related to overall life satisfaction, controlling for health status, feelings of alienation/attachment, and personal disruption.

Social Activity and the Older Person

A review of the literature revealed that one of the most consistent findings is the direct relationship between happiness with life and social participation (Edwards & Klemmack, 1973; Fengler, 1984; Gibson, 1986-1987; Hargrove-Huttel, 1986; Lemon, Bengston, & Peterson, 1972; Longino & Cary, 1982; Lowry, 1984; Palmore & Luikert, 1972; Parant & Whall, 1984; Philbad & Adams, 1972; Riddick, 1985; Soumerai & Avorn, 1983). The significance of social activities for well-being in old age has been a topic of sustained interest among gerontologists. As a result, the relationship between social activity and happiness (as a criterion of well-being) has been frequently studied.

Over 30 years ago, researchers were investigating the predictors for happiness in old age. Lebo (1953) and other trained interviewers went to St. Cloud and Winter Park, Florida to research what makes for happiness in old age. The study examined seven variables said to be important in achieving old age successfully: good health, financial security, hobbies and interests, friends and acquaintances,
living with one's spouse, age, and sex. A total of 383 men and women over the age of 60 were subjects in this cross-sectional study. The researcher concluded that the happier group had more close friends and more out-of-state visitors than did the unhappy old people. The happier group also attended a larger number of club meetings and were members of volunteer organizations.

Two decades ago, Maddox (1963) conducted a 3-year longitudinal study in which he investigated activity as a correlate of life satisfaction among the elderly. The study consisted of 182 ambulatory noninstitutionalized subjects with a median age of 70. The findings revealed that a positive relationship existed between activity and morale. Subjects with high activity scores tended to have high morale scores. The expected relationship of both high scores and low scores was found in 73% of the initial group and in 70% of the group 3 years later.

Graney (1975) conducted a 4-year study of 60 elderly women whose ages ranged from 62 to 68 years. Data were collected about their happiness and their activities which included use of media (i.e., television and radio), interpersonal interaction, and participation in voluntary associations. When demanding and vigorous activities were exchanged for less demanding activities, less happiness was
derived. A positive relationship between happiness and social participation was found. Those elderly women who engaged in more activity were happier than those elderly women who did not participate in as much activity.

Longino and Cary (1982) formally replicated and supported the findings of Lemon, Bengston, and Peterson (1972) concerning the relationship between types of activity and life satisfaction. These researchers concluded that informal activity contributed positively, strongly, and frequently to the life satisfaction of respondents. Informal activity includes social interaction with relatives, friends, and neighbors. No significant relationship was found between life satisfaction and formal organizations in either study. No significant relationship between solitary activities and life satisfaction was found in the study by Lemon et al. (1972) and a negative relationship was found in Longino and Cary's (1982) research.

A representative sample of 301 retirees in metropolitan Adelaide, South Australia, was given an interview questionnaire that asked them to check their regular leisure activities and to describe their retirement satisfaction (O'Brien, 1981). It was found that the number of leisure activities and leisure interaction, together
with satisfaction with health and financial status, were significant predictors of satisfaction with retirement activities. Of these variables, only satisfaction with retirement activities (a list of 93 leisure activities) was a significant predictor of life satisfaction.

Okun, Stock, Haring, and Witter (1984) reported on a meta-analysis of the relationship between social activity and subjective well-being among United States adults. The potential data base was the empirical literature on subjective well-being in adulthood, restricted to United States adults, and to literature prior to 1980. Included in the synthesis were all articles, books, dissertations, theses, technical reports, and other accessible papers utilizing subjective well-being under the umbrella construct terms of happiness, life satisfaction, morale, and studies utilizing global measures of quality of life and well-being. A total of 566 sources formed the complete source list.

Control Over Changing Lifestyle and the Older Person

At times the quality of life of older persons may be affected by their inability to retain control of the circumstances in which they find themselves. The older persons' expectations that their behavior cannot produce
the outcomes they seek is known as the phenomenon of powerlessness (Lubkin, 1986). Miller (1983) defined powerlessness as a perception that one's own actions will not affect an outcome. The American social structure tends to stereotype chronically ill or aged persons by establishing and perpetuating the powerlessness phenomenon. These individuals are sometimes considered incompetent to work gainfully and at times are cast aside from the mainstream of social life. When affected individuals accept society's values, they assume the role of powerlessness (Lubkin, 1986). Research supports that an individual's perception of situational control appears to be a key variable in life satisfaction, happiness, or well-being in the older adult (Carp & Christensen, 1986; Laborde & Powers, 1985; Lewis, 1982; Ryden, 1984).

Palmore and Luikert (1972), identified the third strongest variable of life satisfaction as internal control orientation. The middle-aged who believe that they tend to control their life have greater life satisfaction than those who believe that their life tends to be controlled by luck, fate, destiny, or powerful others.

Fletcher (1981) hypothesized that the more internal the locus of control, the greater the life satisfaction in the elderly. She discussed the importance of promoting a
more internal locus of control as a contributing factor to life satisfaction and purpose in life. Fletcher (1981) concluded that individuals who perceive their future as being controlled by themselves are likely to exhibit less anxiety. She further stated overprotectiveness of children or a paternalistic attitude towards the elderly, while well-meaning, may serve to deprive a person of an internal locus of control necessary to develop or maintain life satisfaction and purpose in life.

Arling, Harkens, and Capitman (1986) examined the relationship between perceived personal control over the events of daily life of older adults in the community and in institutionalized older adults. The perceived control of the older people in the community was related to their level of functional impairment, the number of negative life events they had recently experienced, the cognitive and sensory impairment, and the amount of social contact outside the home. These findings imply that perception of personal control for this population is dependent upon the objective capacity to do things for themselves, the availability of social support to assist them in meeting needs they cannot meet for themselves, and their level of stress as a result of the loss of a loved one, retirement, or other negative life event. The researchers concluded
that the effect of perceived control on other measures of psychosocial adjustment remains to be established. It remains unknown if loss of personal control leads to lower levels of life satisfaction, morale, self-concept, or quality of life. The researchers identified this as an area which needs further investigation in the older adult population.

Summary

The review of literature discussed research studies which attempted to define, measure, and develop theories concerning quality of life. The review revealed investigations involving quality of life under various labels and terms. When reviewing psychological, sociological, gerontological, and nursing literature concerning quality of life theories the researcher found each theory proceeds from its particular view of the individual and society. Numerous attempts have been made to provide a definition of quality of life. Studies investigating the subjective side of quality of life included mental states of a person's well-being, his/her satisfaction or dissatisfaction with life (Andrew & McKennal, 1980; Horley & Little, 1985; Martinson, Wilkening, & Linn, 1985) and happiness or unhappiness with life (Michalos, 1982). Typically, however, environmental
conditions are seen as fostering or facilitating quality of life, and not as constituting or creating it (Carp & Christensen, 1986; Schuessler & Fisher, 1985). Studies investigating the quality of life of specific populations and locations are also found in the literature (Burckhardt, 1985; Fletcher, 1985; Michalos, 1982; Shin, Ahn, Kim, & Lee, 1983; Wilkening & McGranahan, 1978). Research which attempted to measure quality of life encountered the same difficulty as when defining quality of life, that of subjective versus objective measures. Observable environmental conditions such as per capita income or average daily temperature are objective indicators and subjective indicators include responses to survey items measuring feelings of satisfaction, happiness, or related attitudes.

The Chicago Attitude Inventory Scale (Cavan et al. 1951) measured activities and attitudes of older people, Milbrath and Sahr's (1974) scale measured how people feel about their environment, and Campbell et al. (1976) devised a questionnaire for measuring general affect. Other instruments discussed in review the literature were Ferrans and Powers' (1985) Quality of Life Index and Padilla and Grant's (1985) multidimensional instrument for measuring quality of life.
Theories about quality of life attempt to describe the cognitive, affective, and symbolic processes through which individuals assess, determine, and experience the quality of their lives. Each theory proceeds from its particular view of the individual and society (Schuessler & Fisher, 1985). Quality of life theories approach research from a social psychological viewpoint (Lawton et al., 1984), economical viewpoint (Juster et al., 1981; Lui, 1976), ecological approach (Milbraith, 1982), and gerontologist's viewpoint (Cummings & Henry, 1961; Havighurst, 1961).

The review of literature included studies concerning the three major concepts identified in Henderson's (1966) nature of nursing theory; perceived health status, social activity level, and control over changing lifestyle. Previous research supports that the three major concepts are directly related to the quality of life for the older adult. Among all the elements of an older person's life situation, health is the most strongly related to subjective well-being. Perceived health has consistently emerged as being directly associated with satisfaction and quality of life (Gibson, 1986-87; Hoeffer, 1987; Laborde & Powers, 1985; Lowry, 1984; Palmore, 1979). A review of the literature revealed that one of the most consistent findings is the direct relationship between happiness with
Research supports that an individual's perception of situational control appears to be a key variable in life satisfaction, happiness, or well-being in the older adult (Arling et al., 1986; Carp & Christensen, 1986; Fletcher, 1981; Laborde & Powers, 1985; Palmore & Luikert, 1972).

The present study obtained empirical data to support that Henderson's (1966) Nature of Nursing Theory is equated with a quality of life for the older adult. The professional nurse caring for the older adult must have a theoretical framework to base nursing assessments, nursing diagnosis, nursing care plans, nursing interventions, and nursing evaluation so that the nursing profession can attain the status of a science with a clearly identifiable and verifiable knowledge base which can be contested and corroborated in nursing practice (Andreoli & Thompson, 1977).
CHAPTER III

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

A descriptive correlational study was conducted to determine if a relationship exists between Henderson's (1966) basic nursing care needs and quality of life for the older adult. The chapter describes the setting, population and sample, protection of subjects' rights, the instrument used for the study, method for data collection, and treatment of data.

Setting

The setting for the study was an American Association for Retired Persons (AARP) monthly meetings in rural communities in the southwestern portion of the United States. The monthly attendance at the meetings is approximately 70 older adults who are members of the American Association of Retired Persons. The meeting is held on various days of each month in designated community facilities.

Population and Sample

The target population was any person who is the chronological age of 50 or older. The accessible
population was all people who met the delimitations set forth in the study and were attending the designated monthly AARP meetings, when the data were being gathered. The sample was a convenience sample of all individuals who met the requirements for subject participation and voluntarily agreed to participate in the study.

Protection of Human Subjects

The participants' rights were protected in accordance with the guidelines for research involving human subjects established by the Texas Woman's University. The research was exempt from Human Subjects Review Committee because the study met the qualifications for Category I of the Department of Health and Human Services regulations incurring no risk to the subject (Appendix C). Permission to conduct the study was obtained from the Texas Woman's University Graduate School (Appendix D).

Each participant in the study was informed of the nature and purpose of the research via written explanation which was attached to the opinionnaire (Appendix E). On top of the first page of the opinionnaire, the statement "COMPLETION OF THIS OPINIONNAIRE IS CONSTRUED AS INFORMED CONSENT" was typed in all capital letters and underlined. All questions of the potential subjects were answered by the researcher. Participants were assured of anonymity by
instructions not to put their name on the opinionnaire. Each participant was informed that participation was voluntary. The returned opinionnaires will be kept confidential by the researcher and destroyed 1 year after completion of the study.

Instruments
The instrument for the study consisted of three sections: the demographic data, the investigator-developed Henderson's Basic Nursing Care Needs Opinionnaire, and the Quality of life Index (Ferrans & Powers, 1985). The section on demographic data included questions concerning the subject's gender, age, health status, living status, and yearly income (Appendix F).

The Henderson's (1966) Basic Nursing Care Needs Opinionnaire (Appendix A) was developed by the researcher by converting the 14 basic nursing care needs into a 3-point Likert scale with a forced response section (always, sometimes, never). The questions are phrased to determine by self-report the subject's ability to perform the identified basic nursing care needs. The participant was asked to place a checkmark under the most appropriate response. The responses are given a value of 1 to 3 and the scores can range from 18-54. The score of 3 is assigned to "always", 2 to "sometimes", and 1 to "never".
The score of zero is assigned to missing data. The score of 54 is indicative of all basic nursing care needs being met, whereas a score of 18 identifies those persons who feel none of their basic nursing care needs are being met.

The Quality of Life Index (Ferrans & Powers, 1985) consists of two sections containing 32-items (Appendix B). Permission was obtained to use the instrument (Appendix F). One section measures satisfaction with various domains of life and the other measures the importance of the domain to the subject. The original 6-point Likert scale was modified to a 3-point Likert scale with a forced response section for this study. The satisfaction section consists of the forced responses with the score of 1 given to not satisfied, 2 to satisfied, 3 to very satisfied. The importance section consists of the forced responses with the score of 1 given to not important, 2 to important, and 3 to very important. The scores can range from 64 to 192, with a high score being indicative of a high quality of life.

The Quality of Life Index was developed to measure the quality of life of healthy individuals, as well as those who are experiencing an illness. Both the satisfaction and importance sections assess the following areas: health care, physical health and functioning, marriage, family,
friends, stress, standard of living, occupation, education, leisure, future retirement, peace of mind, personal faith, life goals, personal appearance, self-acceptance, general happiness, and general satisfaction (Ferrans & Powers, 1985).

The Quality of Life Index scores are determined by adjusting satisfaction responses for the importance responses. Thus, the adjusted quality of life score reflects not only satisfaction, but also how much an individual values each domain. Therefore, the adjustment of satisfaction responses based on importance corrects for the varying influence of individual values and thus produces a more accurate reflection of the subject's quality of life (Ferrans & Powers, 1985).

Adequate reliability and validity for this instrument has been established in a study utilizing nursing students and dialysis patients (Ferrans & Powers, 1985). Results supported criterion-related validity (0.75 for graduate students; 0.65 for dialysis patients), stability reliability (test-retest correlations of 0.87 at 2-week interval; 0.81 at 1-month interval), and internal consistency (Cronbach's alphas of 0.93 with graduate students; 0.90 with dialysis patients) with the Quality of Life Index when used with a healthy sample. In addition,
the Quality of Life Index was demonstrated to be reliable and valid when modified for use with dialysis patients. Ferrans and Powers' (1985) Quality of Life Index is said to "show promise as an instrument to be used in nursing research and clinical practice, facilitation of communication with patients, and planning of interventions to improve quality of life" (p. 21).

Pilot Study

The researcher conducted a pre-pilot study to determine the language/vocabulary difficulties, the understandability of the items and instructions, and to identify any problem areas prior to a pilot study. Shelly (1984) suggested that after an opinionnaire is developed, the items should be reviewed by experts to assess how well the items measure the domain category. Experts can also point out errors and ambiguities in items and make recommendations for changes. The instrument was given to a panel of six experts for evaluation. All experts were between the age of 50 and 75, the target population for the study; two experts were nursing professors familiar with Henderson's (1966) nature of nursing theory, quality of life research concerning the older adult, and questionnaire development; the remaining four experts were comprised of
male and female lay persons. All experts returned the instruments with comments within the allotted time period.

Numerous parts of the instrument were changed after the pre-pilot study. Any comment/suggestion addressed by at least three of the experts was changed, deleted, or somehow improved. The Likert-type scale on both instruments was changed from a 4-point Likert scale to a 3-point Likert scale. In Henderson's Basic Nursing Care Needs Opinionnaire it was determined that asking the subject's ability to perform a certain basic nursing care need "sometimes" or "often" was very ambiguous. Also, in the nursing interventions based on Henderson's (1966) nature of nursing theory, the nurse will assess and intervene whether the client's ability is "sometimes" or "often". The three responses are also much easier and more understandable for the older adult.

The Quality of Life Index (Ferrans & Powers, 1985) 4-point Likert scale was also converted to a 3-point Likert scale with responses of very satisfied, satisfied, and not satisfied with the same adjectives being used with the importance section. This keeps the instrument simple and makes it easier for the subjects to answer each item. The four lay experts commented on the response section's
confusion. They stated had difficulty in answering and necessary changes were made.

Three of the experts commented on the repetitiveness of the Quality of Life Index. The satisfaction and importance sections ask the same question and there was difficulty in realizing that one section dealt with the importance of the item to the subject and the satisfaction section was concerned with how satisfied a person is at this time in life. To help clarify this confusion the researcher placed a statement in the instruction section that stated "Section one is concerned with how important that area of your life is to you and the second section is concerned with how satisfied you are with your life at this time".

Changes were also made on the Henderson Basic Nursing Needs Opinionnaire. The experts had difficulty in responding to items 6, 8, 9, 14, and 15. To help clarify number 6 and 8, the researcher divided the nursing care needs into two separate questions and also gave an example of what the question was asking to help clarify the basic nursing care need. Question number 14 was confusing to the experts because they did not understand the words "that leads to your normal development and health" thus, this part was deleted from the item. Three examples of health
care facilities were given to help clarify question 15. The revised Henderson Basic Nursing Care Needs Opinionnaire consisted of 18 items instead of the original 14 items. The revised instrument consists of four pages instead of the original seven by changing response sections and putting the sections on the front and back of one page. The pilot study utilized a convenience sampling technique to obtain subjects (\(N = 34\)) from eligible individuals who were members of a church group. The researcher addressed the church group and gave a short explanation to the research and asked for volunteers. Forty volunteers from the church group were given the instrument with a stamped envelope and requested that it be returned no later than 1 month from the date of distribution. Thirty-four individuals returned the opinionnaire within the allotted time. The individual's ages ranged from 50 to 75 years with the mean being 61.85. The sample consisted of 35% males (\(n = 12\)) and 65% females (\(n = 22\)).

Demographic data obtained from the subjects revealed that 18% lived alone (\(n = 6\)), 59% lived with spouse (\(n = 20\)), 20% lived with family (\(n = 7\)), and one lived with other accounting for 3% of sample. Thirty-eight percent (\(n = 11\)) responded health status was excellent, 26% health status was good (\(n = 9\)), 26% health status was fair (\(n = \))
9), and 9% responded poor health status (n = 3). Six percent of the subjects had annual income of less than $10,000 (n = 2), 38% had annual income between $10,001 and $20,000 (n = 13), 23% had annual income between $20,001 and $30,000 (n = 8), and the remaining 11 subjects had an annual income over $30,001.

The Pearson product-moment correlation coefficient two-tailed test was used to determine the relationship between the Quality of Life Index (QLI) scores and the Henderson Basic Nursing Needs Opinionnaire scores, the perceived health status (PHS), the social activity scores (SA), and the control over changing lifestyle (COCL). Critical regions of .05 level of significance were established. All relationships were found to be significant at the <.001 level of significance. A correlation coefficient of r = .62, df = 33, p = .000 was found between the QLI and the Henderson Basic Nursing Needs Opinionnaire. The correlation coefficients between the QLI and PHS were r = .55, df = 33, p = .001, QLI and SA were r = .67, df = 33, p = .000, and QLI and COCL were r = .63, df = 33, p = .000. Sampling of items is the major source of error in an instrument and internal consistency reliability should be evaluated on all new instruments. Cronbach's alpha estimates internal consistency based on
the average inter-item correlation among items within a test and the number of items (Kerlinger, 1973). Internal consistency reliability of Henderson's Basic Nursing Needs Opinionnaire was supported by a Cronbach's alpha of 0.95. A Cronbach's alpha of 0.97 was found when changing the response section of the Quality of Life Index (Ferrans & Powers, 1985). This result is consistent with the findings in the study by Ferrans and Powers (1985) where Cronbach's alpha results were 0.93 with graduate students and 0.90 with dialysis patients.

Data Collection

The method for collecting the data was a self-administered opinionnaire presented to members of local chapters of the American Association of Retired Persons. The instrument was given to all participants who voluntarily agreed to complete the opinionnaire.

The researcher, who was identified by a white lab coat and name tag, was available to answer questions during the collection of the data. All individuals who met the criteria of being 50 to 75 years of age and who voluntarily agreed to participate in the study became subjects in the study.

The self-administered opinionnaire consisted of (a) an introductory statement explaining the purpose of the study
and assuring and defining the subject's rights (anonymity, confidentiality, and voluntary participation) (Appendix E); 
(b) explicit directions for completing the opinionnaire; 
(c) demographic data that included the subject's gender, age, health status, yearly income, and living status (Appendix C); (d) Henderson's Basic Nursing Care Needs Opinionnaire (Appendix A) and the Quality of Life Index (Appendix B).

Treatment of Data

The first research hypothesis was tested by using the Pearson r product moment correlation. The Pearson r statistic is used with interval level data and two variables. The second hypothesis was tested by using the Pearson r product moment correlation. A multiple regression statistical test was applied with the criterion variable of quality of life, measured at the interval level and the predictor variables of perceived health status, social activity, and control over changing lifestyle. The third hypothesis used a two-way ANOVA statistical test appropriate for determining the differences between the demographic variables and quality of life. A .05 level of significance was established to test the hypotheses. Descriptive statistics were used to summarize the demographic data. The data were analyzed on the Texas
Woman's University computer system using the Statistical Package for Social Science (SPSSX) for the Decsystem-20.
A descriptive correlational study was conducted to determine if Henderson's (1966) basic care needs can be equated with a quality of life for the older adult. This chapter describes the sample and the results of the statistical analysis of the data. Findings of the study are presented relevant to each of the hypotheses, to the new instrument entitled Henderson's Basic Nursing Care Needs Opinionnaire, and additional findings are also noted.

Description of the Sample

A convenience sampling technique was employed to obtain subjects (N = 173) from eligible individuals who attended rural community American Association of Retired Persons meetings during the month of January 1988 in the southwestern portion of the United States. The ages ranged from 50 to 92 years with the mean being 72.34 years old. The sample consisted of 42% males (n = 72) and 58% females (n = 101).

Demographic data were gathered regarding self-reported living status, health status, and yearly income (Table 1). Over one-half (n = 93) of the subjects lived with their spouse. The self-reported health status was almost evenly
<table>
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<th>Response Percentage</th>
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<td>Lives with spouse</td>
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<tr>
<td>Good</td>
<td>54</td>
<td>31.2</td>
</tr>
<tr>
<td>Fair</td>
<td>42</td>
<td>24.3</td>
</tr>
<tr>
<td>Poor</td>
<td>26</td>
<td>15.0</td>
</tr>
<tr>
<td>Yearly Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less then $10,000</td>
<td>38</td>
<td>22.0</td>
</tr>
<tr>
<td>$10,001 to $20,000</td>
<td>58</td>
<td>33.5</td>
</tr>
<tr>
<td>$20,001 to $30,000</td>
<td>35</td>
<td>20.2</td>
</tr>
<tr>
<td>Greater than $30,001</td>
<td>42</td>
<td>24.3</td>
</tr>
</tbody>
</table>
distributed among excellent, good, and fair health with
poor health accounting for only 15% \((n = 26)\) of the sample.
Twenty-two percent of the sample reported they made less
than $10,000 yearly with the remaining subjects reporting
they made over $10,000 yearly.

Findings

The first null hypothesis predicted that there is no
significant relationship between Henderson's (1966) Basic
Nursing Care Needs Opinionnaire and the Quality of Life
Index (Ferrans & Powers, 1985). The Pearson product-moment
correlation coefficient two-tailed test was used to test
the hypothesis. A critical region of .05 level of
significance was established. The relationship was found
to be significant with a correlation coefficient of \(r = .63, df = 171, p = .000\). The results of the data rejected
the null hypothesis so the alternate hypothesis is accepted
that indicates there is a significant relationship between
Henderson's Basic Nursing Care Needs Opinionnaire and the
Quality of Life Index in this sample at <.001 level of
significance (Table 2).

The second null hypothesis stated there is no
significant relationship between quality of life and the
three major concepts, perceived health status, social
activity level, and control over changing lifestyle
Table 2

Relationship between Quality of Life, Henderson's Basic Nursing Care Needs Opinionnaire, Perceived Health Status, Social Activity Level, and Control Over Changing Lifestyle

<table>
<thead>
<tr>
<th></th>
<th>Coefficient of correlation</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of life with Henderson's</td>
<td>.632</td>
<td>.000</td>
</tr>
<tr>
<td>Basic Care Needs Opinionnaire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of life with Perceived</td>
<td>.609</td>
<td>.000</td>
</tr>
<tr>
<td>Health Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of life with Social</td>
<td>.617</td>
<td>.000</td>
</tr>
<tr>
<td>Activity Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of life with Control</td>
<td>.611</td>
<td>.000</td>
</tr>
<tr>
<td>Over Changing Lifestyle</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
identified in Henderson's Basic Nursing Care Needs Opinionnaire. The Pearson product-moment correlation coefficient was used to statistically analyze this hypothesis with a level of significance set at .05. A significant relationship was found between quality of life and perceived health status, $r = .61$, $df = 171$, $p = .000$. A correlation coefficient of .62 was found between quality of life and social activity level, with a $p = .000$, $df = 171$. Quality of life and control over changing lifestyle was significant with a $r = .61$, $df = 171$, $p = .000$. All three major concepts identified in Henderson's Basic Nursing Care Needs Opinionnaire were significantly correlated with the Quality of Life Index (Table 2).

The third null hypothesis stated there is no difference between quality of life and the self-reported demographic data. This hypothesis was tested using the two-way ANOVA with the level of significance established at .05. There was no significant difference between quality of life and gender ($F (1,170) = .68$, $p = .412$), therefore, the null hypothesis was not rejected. Table 3 summarizes the data and the ANOVA.

The two-way ANOVA yielded a significant difference between quality of life and the four groups of living
Table 3

Summary of Data and Analysis of Variance for Quality of Life and Gender

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2.306</td>
<td>1</td>
<td>2.306</td>
<td>.7663</td>
<td>.4120</td>
</tr>
<tr>
<td>Within groups</td>
<td>279.853</td>
<td>170</td>
<td>3.410</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>582.160</td>
<td>171</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>71</td>
</tr>
<tr>
<td>M</td>
<td>6.23</td>
</tr>
<tr>
<td>SD</td>
<td>2.17</td>
</tr>
</tbody>
</table>
status \( (F (3, 169) = 6.45, p = .000) \) at the .05 level of significance. The modified LSD post hoc procedure indicated significant differences in the means of individuals who live alone and individuals who live with spouse. Based on these findings, the null hypothesis was rejected. Table 4 summarizes the data and the ANOVA.

The ANOVA yielded a significant difference between quality of life and health status \( (F (3, 169) = 4.81, p = .003) \), therefore, the null hypothesis was rejected. The modified LSD post hoc procedure showed a significant difference in the means of two groups. The individuals in the "excellent" and "good" groups viewed themselves as having a different type of quality of life than those individuals who stated they were in "poor" health. Table 5 summarizes the data and the ANOVA.

A significant difference was found between quality of life and the four groups of yearly income when analyzed by the two-way ANOVA \( (F (3, 169) = 7.04, p = .000) \), therefore, the null hypothesis was rejected. The modified LSD post hoc procedure indicated significant differences in the means of two groups. Individuals who reported a yearly income of less than $10,000 and less than $20,000 viewed their quality of life different than individuals who had a
Table 4

Summary Data and Analysis of Variance for the Four Groups of Living Status and Quality of Life

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>60.985</td>
<td>3</td>
<td>20.061</td>
<td>6.458</td>
<td>.0004</td>
</tr>
<tr>
<td>Within groups</td>
<td>521.878</td>
<td>169</td>
<td>3.106</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>582.063</td>
<td>172</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5

Summary Data and Analysis of Variance for the Groups of Health Status and Quality of Life

<table>
<thead>
<tr>
<th>Source</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>51</td>
<td>54</td>
<td>42</td>
<td>26</td>
</tr>
<tr>
<td>M</td>
<td>6.60</td>
<td>6.23</td>
<td>5.60</td>
<td>4.99</td>
</tr>
<tr>
<td>SD</td>
<td>1.74</td>
<td>1.48</td>
<td>1.75</td>
<td>2.39</td>
</tr>
<tr>
<td><strong>Source</strong></td>
<td><strong>SS</strong></td>
<td><strong>df</strong></td>
<td><strong>MS</strong></td>
<td><strong>F</strong></td>
</tr>
<tr>
<td>Between groups</td>
<td>45.881</td>
<td>3</td>
<td>15.294</td>
<td>4.817</td>
</tr>
<tr>
<td>Within groups</td>
<td>536.497</td>
<td>169</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>582.379</td>
<td>172</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
yearly income of greater than $30,000. Table 6 summarizes the data and the ANOVA.

**Additional Findings**

A multiple regression analysis was used to determine which of the three major variables, perceived health status, social activity level, and control over changing lifestyle and the self-reported demographic variables of gender, living status, and yearly income was a predictor of quality of life for the older adult. The results of the multiple regression yielded the following results; two of the variables were significant in predicting a quality of life for the older adult. The analysis indicated that 38% of the variance in the quality of life of the older adult was accounted for by social activity level ($F (1,171) = 105.48, p = .000$). In the step-wise multiple regression, perceived health status and social activity together accounted for 40% of the variance in the quality of life for the older adult ($F (2,170) = 57.89, p = .000$).

**Henderson's Basic Nursing Care Needs Opinionnaire**

Sampling of items is the major source of error in an instrument and internal consistency reliability should be evaluated on all new instruments. Cronbach's alpha estimates internal consistency based on the average inter-
Table 6

Summary Data and Analysis of Variance for the Four Groups of Yearly Income and Quality of Life

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>64.710</td>
<td>3</td>
<td>21.570</td>
<td>7.041</td>
<td>.0002</td>
</tr>
<tr>
<td>Within groups</td>
<td>517.669</td>
<td>169</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>582.379</td>
<td>172</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>5.46</td>
<td>2.23</td>
</tr>
<tr>
<td>58</td>
<td>5.68</td>
<td>1.39</td>
</tr>
<tr>
<td>35</td>
<td>6.36</td>
<td>6.36</td>
</tr>
<tr>
<td>42</td>
<td>7.03</td>
<td>7.03</td>
</tr>
</tbody>
</table>
item correlation among items within a test and the number of items (Kerlinger, 1973). Internal consistency reliability of Henderson's Basic Nursing Care Needs Opinionnaire was supported with this sample by yielding a Cronbach alpha of 0.97.

Once a measure has achieved an adequate reliability coefficient, a factor analysis can be performed on the data. The factor loading weight for the items in the Henderson Basic Nursing Care Needs Opinionnaire was established at the .30 level. The results yielded two factors. Factor 1 included 15 of the Henderson Basic Nursing Care Needs Opinionnaire items with a loading factor of no less than .60. Henderson's Basic Nursing Care Needs Opinionnaire items number 16, 17, and 18 loaded at .85, .83, and .73 respectively on Factor 2. Table 7 summarizes the individual items of the factor analysis.

Summary

Findings of the study are summarized as follows:

1. The level of attainment of Henderson's Basic Nursing Care Needs Opinionnaire can be equated with a quality of life for the older adult.

2. The three major concepts of Henderson's Basic Nursing Care Needs, perceived health status, social
Table 7
Summary of the Factor Analysis of Henderson's Basic Nursing Care Needs Opinionnaire

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Henderson Item 9</td>
<td>.8950</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 8</td>
<td>.8567</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 12</td>
<td>.8563</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 14</td>
<td>.8562</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 10</td>
<td>.8310</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 11</td>
<td>.8144</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 6</td>
<td>.7959</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 3</td>
<td>.7949</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 2</td>
<td>.7810</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 13</td>
<td>.7216</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 4</td>
<td>.6872</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 1</td>
<td>.6848</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 7</td>
<td>.6833</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 15</td>
<td>.6741</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 5</td>
<td>.6025</td>
<td></td>
</tr>
<tr>
<td>Henderson Item 16</td>
<td></td>
<td>.8544</td>
</tr>
<tr>
<td>Henderson Item 17</td>
<td></td>
<td>.8321</td>
</tr>
<tr>
<td>Henderson Item 18</td>
<td></td>
<td>.7349</td>
</tr>
</tbody>
</table>
activity level, and control over changing lifestyle are significantly related to quality of life.

3. Quality of life was not significantly different between the males and females in this study.

4. There is a significant difference in self-reported living status, health status, and yearly income and quality of life for the older adult.

5. Social activity level accounts for 38% of the variance in the quality of life for the older adult. Subjects with higher social activity level tended to have a higher quality of life.

6. The two variables of social activity level and perceived health status accounts for 40% of the variance in the quality of life for the older adult.

7. Henderson's Basic Nursing Care Needs Opinionnaire has significant internal reliability consistency.

8. Factor analysis of the Henderson's Basic Nursing Care Needs Opinionnaire revealed two factors; Factor 1 includes 15 items and Factor 2 includes 3 items.
CHAPTER V

SUMMARY OF THE STUDY

This chapter presents a summary of the study, a
discussion of the findings, and conclusions and
implications. Recommendations for future research
regarding quality of life for the older adult are also
made.

Summary

A descriptive correlational approach was employed to
determine if a relationship exists between the level of
attainment of Henderson's (1966) basic care needs and the
level of quality of life for the older adult. The study
was also designed to determine if the researcher identified
concepts of perceived health status, social activity level,
and control over changing lifestyle based on Henderson's
Basic Nursing Care Needs Opinionaire is associated with
quality of life for the older adult. The theoretical
framework for this study was based on Henderson's (1966)
nature of nursing theory. Three null hypotheses were
tested:

1. There is no significant relationship between the
level of attainment of Henderson's (1966) basic care needs
and the level of quality of life for the older adult.
2. There is no significant relationship between quality of life and the three major concepts, perceived health status, social activity level, and control over changing lifestyle identified in Henderson's (1966) 14 basic care needs and quality of life for the older adult.

3. There is no significant difference between the self-reported demographic variables and quality of life for the older adult.

The population from which the sample was drawn consisted of individuals attending rural community American Association of Retired Persons meetings during the month of January 1988. The sample included 173 individuals between the ages of 50 to 92 who voluntarily agreed to participate in the study. The researcher-developed Henderson's Basic Nursing Care Needs Opinionnaire was utilized to measure the individual's ability to independently perform the 14 basic care needs stated in Henderson's (1966) nature of nursing theory. The quality of life level was measured by the Quality of Life Index (Ferrans & Powers, 1985).

The analysis of data supported that attainment of Henderson's (1966) 14 basic care needs can be equated with a quality of life for the older adult. A significant relationship was found between the researcher identified
concepts of perceived health status, social activity level, and control over changing lifestyle and quality of life for the older adult. Significant differences were found between the self-reported demographic variables of living status, health status, and yearly income and quality of life for the older adult. No significant difference was found between males and females and quality of life for the older adult. Internal consistency reliability and criterion validity were established for the researcher-developed Henderson's Basic Nursing Care Needs Opinionnaire. This study supported that 40% of the variance in the quality of life for the older adults is accounted for by perceived health status and social activity level.

Discussion of Findings

The findings of this study suggested that attainment of Henderson's basic care needs can be equated with a quality of life for the older adult. A significant relationship was found between Henderson's Basic Nursing Care Needs Opinionnaire and the Quality of Life Index (Ferrans & Powers, 1985). Older adults who reported a high quality of life on the Quality of Life Index also had the ability to independently meet the 14 basic care needs identified by Henderson's (1966) nature of nursing theory.
This finding was expected since Henderson (1966) deduced her 14 basic care needs from physiological and psychological principles. Many of Henderson's (1966) nature of nursing theory assumptions have validity because of their high level of agreement with the literature and research conclusions of scientists in other fields. Henderson's 14 basic needs correspond closely to Maslow's widely accepted human needs hierarchy (Marriner, 1986).

Quality of life theories differ in the centrality they accord to cognition, affect, and social interaction; for example, psychological quality of life theories stress need fulfillment and economic theories stress resource allocation (Schuessler & Fisher, 1985). Each theory proceeds from its particular view of the individual and society (Schuessler & Fisher, 1985). The American Nurses' Association Social Policy Statement (1980) states that "Nurses use theory in the form of concepts, principles, processes, and the like, to sharpen their observations and to understand the phenomena within the domain of nursing practice. Such understanding precedes and serves as a basis for determining nursing actions to be taken" (p. 11).

With the American Nurses' Association Social Policy Statement in mind, Henderson's (1966) nature of nursing theory was the theoretical framework for the proposed
Quality of Life for the Older Adult Model (Figure 2). The significant research findings of the study support that attainment of Henderson's 14 basic needs can be equated with a quality of life for the older adult. Therefore, using Henderson's (1966) Nature of Nursing Theory as the theoretical framework for the proposed model is supported. Nursing theories should guide nursing practice.

Henderson's (1966) Nature of Nursing Theory is applicable in nursing practice. The nursing process can guide the nursing care of the older adult based on the individual's independent ability to meet Henderson's (1966) 14 basic care needs. In the assessment phase, the nurse would assess the individual in all 14 components of basic nursing care. The planning phase involves making the plan fit the individual's needs, updating the plan as necessary based on the changes, using the plan as a record and ensuring it fits with the individual's perception of his/her desired quality of life. In the implementation phase, the nurse helps the individual perform activities to maintain health, to recover from illness, or to aid in a peaceful death. Interventions are individualized, depending on physiological principles, age, cultural background, emotional balance, and physical and intellectual capacities (Marriner, 1986). Evaluation is
based on the individual's degree to which he/she performs the 14 basic care needs independently.

At the present time there is no universally accepted quality of life theory (Schuessler & Fisher, 1985). The nursing profession must have a theoretical framework from which to base nursing care to ensure a high quality of life for older adults. The findings of this study lend support to Henderson's (1966) nature of nursing theory as having the potential for being a theoretical framework on which to base nursing care concerning the quality of life for the older adult.

A significant relationship was found between quality of life and the researcher identified concepts of perceived health status, social activity level, and control over changing lifestyle. Life satisfaction, successful aging, individual well-being, happiness, morale, adaptation, and positive self-image are terms used synonymously with "quality of life" (George & Bearon, 1980). Perceived health status has consistently emerged as being positively related to life satisfaction (Edwards & Klemmack, 1973; Kozma & Stones, 1983; Larson, 1978; Martinson, Wilkening, & Linn, 1985). The findings of this study further support that perceived health status was significantly associated with quality of life for the older adult. Perceived health
status was defined based on Henderson's (1966) basic care needs and the individual's ability to independently breathe normally, eat and drink adequately, eliminate body wastes, sleep and rest, keep body clean and well-groomed and protect the integument, maintain body temperature within normal limits by adjusting clothing and modifying environment, to move and maintain desirable postures, and select suitable clothes, dress, and undress self. The self-reported demographic data support the relationship between perceived health status and quality of life for the older adult. The individual who perceived his/her health status as excellent and good had a higher quality of life then the individual who perceived his/her health as poor.

A review of the literature revealed that one of the most consistent findings is the direct relationship between happiness with life and social participation (Fenger, 1984; Hargrove-Huttel, 1986; Parant & Whall, 1984; Riddick, 1985). The findings of this study support previous research and found a significant relationship between social activity level and quality of life for the older adult. Those individuals who were more socially active had a higher quality of life than those individuals who were less socially active. Social activity level was defined based on Henderson's 14 basic care needs and the
individual's ability to independently work in such a way that there is a sense of accomplishment, play or participate in various forms of recreation, and ability to worship according to one's faith.

The significance of social activities for well-being in old age has been a topic of sustained interest among gerontologists. As a result, the relationship between social activity and happiness (as a criterion of well-being) has been frequently studied (Larson, 1978). Researchers have investigated the predictors for happiness in old age for over 30 years to include housing satisfaction, health status, activities, changes in life events, sex, marital status, and socioeconomic status (Lebo, 1953; 1963; Longino & Cary, 1982; Maddox, 1963; Okun, Stock, Haring, & Witter, 1984). The present study revealed that 38% of the variance of quality of life for the older adult is accounted for by social activity level. Perceived health status and social activity level together accounted for 40% of the variance in the quality of life for the older adult. These findings lend further support that health status and social activity level are predictors for a high quality of life in the older adult. Other variables that account for the remaining 60% of the variance in the quality of life for the older adult remain
unknown. The demographic variables of living status, yearly income, and gender in this study did not account for any of the unexplained variance in the quality of life for the older adult when analyzed with a step-wise multiple regression. The variables included in the multiple regression were perceived health status, social activity level, control over changing lifestyle, gender, age, health status, living status, and yearly income.

At times the quality of life of older adults may be affected by their inability to retain control of the circumstances in which they find themselves (Lubkin, 1986). Research supports that an individual's perception of situational control appears to be a key variable in life satisfaction, happiness, quality of life, or well-being in the older adult (Carp & Christensen, 1986; Laborde & Powers, 1985; Lewis, 1982; Ryden, 1984). Palmore and Luikert (1972) identified the third strongest variable of life satisfaction as internal control orientation. The older adult who believes that he/she tends to control his/her own life has greater life satisfaction than those who believe that his/her life tends to be controlled by luck, fate, destiny, or powerful others. Conversely, Arling, Harkens, and Capitman (1986) concluded that the effect of perceived control on other measures of
psychosocial adjustment remains to be established and it remains unknown if loss of personal control leads to lower levels of life satisfaction, morale, self-concept, or quality of life. The researchers identified this as an area which needs further investigation in the older adult population. The findings of this study support a significant relationship between quality of life and control over changing lifestyle. Those individuals who perceived he/she had control over his/her changing lifestyle had a higher quality of life than the individual who felt he/she had less control over his/her changing lifestyle. Control over changing lifestyle was defined based on Henderson's (1966) basic care needs and the individual's ability to independently learn, discover, or satisfy the curiosity that leads to normal development and health and use available health facilities; ability to avoid dangers in the environment and avoid injuring others; and ability to communicate with others in expressing emotions, needs, fears, or opinions.

Living status has been found to be a strong predictor of not only life satisfaction, but of psychological well-being in general. Older adults living with spouses have a higher life satisfaction than older adults who live alone (Kozma & Stones, 1983; Larsons, 1978; Lebo, 1953; Longino &
Cary, 1982; Martinson, Wilkening, & Linn, 1985). The findings of this study lend further support to previous research and found a significant difference in individuals who lived alone and individuals who lived with their spouse. Those individuals who lived alone had a lower quality of life than those individuals who lived with their spouse. Most researchers have explained this relationship on the basis of the argument that living alone presents a major psychological problem in our society (Sauer, 1977).

Research indicates socioeconomic status has received extensive support as a predictor of life satisfaction. The lower the income, the more likely the person will have low life satisfaction (Palmore & Luikert, 1972; Kozma & Stones, 1983; Riddick, 1985; Soumerai & Avorn, 1983). This study reported significant differences in those individuals who reported a yearly income of less than $10,000 and less than $20,000 and those individuals who reported a yearly income of greater than $30,000. Those individuals who had yearly incomes of less than $10,000 and less than $20,000 had a lower of quality of life than those individuals who received a yearly income of greater than $30,000. This finding further supports that socioeconomic level is associated with quality of life for the older adult.
As documented by research and further supported by this study, gender is not a strong predictor of life satisfaction (Larsons, 1978; O'Brien, 1981; Parant & Whall, 1984). No significant difference was found between males and females and quality of life for the older adult. This finding further supports previous research findings that gender is not associated with quality of life for the older adult.

The Henderson's Basic Nursing Care Needs Opinionnaire was developed by the researcher by converting the 14 basic care needs identified in Henderson's (1966) Nature of Nursing Theory into a 3-point Likert scale questionnaire. The individual responded "always", "sometimes", or "never" as to his/her ability to independently meet the 14 basic needs. The significant relationship found between the Henderson's Basic Nursing Care Needs Opinionnaire and the Quality of Life Index (Ferrans & Powers, 1985) supported criterion-related validity for the opinionnaire. Criterion-related validity is evaluated by comparing the scores of one instrument with those of another instrument believed to measure the attribute of interest. The criterion measure's reliability and validity must be known to allow faith to be placed in the results (Ferrans & Powers, 1985). The Quality of Life Index has established
validity and reliability to support its use as the criterion measure to assess the criterion-related validity of the Henderson's Basic Nursing Needs Opinionnaire. The findings of this study support that attainment of Henderson's 14 basic care needs can be equated with a quality of life for the older adult. Internal consistency reliability of the Henderson's Basic Nursing Care Needs Opinionnaire was supported by a Chronbach's alpha of 0.97.

Once a measure has achieved an adequate reliability coefficient, it may be appropriate to use factor analysis. Factorial validity is the correlation of the test with whatever is common to a group of items included in the measure (Shelley, 1984). Henderson's Basic Nursing Care Needs Opinionnaire factor analysis yielded two factors, all of which had a factor loading coefficient of no less than .60. Factor 2 included the two basic care needs of ability to play or participate in various forms of recreation and the ability to learn, discover, or satisfy the curiosity that leads to normal development and health, and use available health facilities. Factor 1 included the remaining basic care needs of ability to breathe normally, eat and drink adequately, eliminate body wastes, sleep and rest, keep body clean and well-groomed and protect the integument, maintain body temperature within normal limits
by adjusting clothing and modifying environment, to move and maintain desirable postures, select suitable clothes (dress and undress), work in such a way that there is a sense of accomplishment, worship according to one's faith, avoid dangers in the environment and avoid injuring others, and communicate with others in expressing emotions, needs, fears, or opinions.

Factor 1 appears to include basic care needs that are God given rights while Factor 2 include basic care needs of a higher level. This finding does not support the researcher identified concepts of perceived health status, social activity level, and control over changing lifestyle based on the previous research studies. Factor 1 could be identified as lower level basic care needs and Factor 2 could be identified as higher level basic needs. The ability to play and participate in recreational activities and to learn, discover, or satisfy curiosity that leads to normal development and health, and use of health facilities seems to be added enjoyment to quality of life and not a basic need. This finding warrants more investigation.

Conclusions and Implications

The results support the propositional statement tested in the study: The greater the individual's perception in independently performing Henderson's (1966) 14 basic
nursing care needs, the greater the individual's perception of a higher quality of life. The value of Henderson's nursing theory has been strengthened. Nurses can be encouraged to apply the theory in their care of older persons.

Recommendations for Further Study

Recommendations for further study are as follows:

1. Future studies should include samples consisting of individuals residing in institutionalized setting and individuals living independently in society to further support that attainment of Henderson's 14 basic care needs can be equated with a quality of life for the older adult.

2. Further studies should attempt to search for other explanatory variables that could account for a high quality of life for the older adult.

3. Further studies with different age populations should utilize Henderson's (1966) Nature of Nursing Theory as a theoretical framework to document nursing theory as a basis for nursing care.

4. Future studies should attempt to determine if Henderson's basic needs of ability to play and participate in recreational activities and ability to learn, discover, or satisfy curiosity that leads to normal development and health, and use of health facilities are higher level needs
of the older adult and not basic needs as proposed in Henderson's (1966) Nature of Nursing Theory.
REFERENCES


APPENDIX A

Henderson's Basic Nursing Care Needs Opinionnaire
Please place a check mark (✓) under the most appropriate response to each question. Please answer each statement to the best of your ability as there are no right or wrong answers. Thank you for your time.

<table>
<thead>
<tr>
<th></th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
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</thead>
<tbody>
<tr>
<td>1. Are you able to breathe normally?</td>
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<td>2. Are you able to eat and drink adequately?</td>
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<td>3. Are you able to eliminate body wastes?</td>
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<tr>
<td>4. Are you able to move and maintain desirable postures?</td>
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<td>5. Are you able to sleep and rest?</td>
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<td>6. Are you able to select suitable clothes?</td>
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<tr>
<td>7. Are you able to dress and undress yourself?</td>
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<tr>
<td>8. Are you able to maintain your body at normal body temperature (keep comfortable in cold and heat) by adjusting clothing and modifying the environment?</td>
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<tr>
<td>9. Are you able to keep your body clean and well-groomed?</td>
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<tr>
<td>10. Are you able to protect your skin?</td>
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<tr>
<td>11. Are you able to avoid dangers in your environment? (prevent falls in the home, see red light on stove, use space heaters safely, able to see to take your medications correctly)</td>
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<td>12. Are you able to avoid injuring others? (able to see and hear to drive safely)</td>
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<tr>
<td>13. Are you able to communicate with others in expressing emotions, needs, fears, or opinions?</td>
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<tr>
<td>14. Are you able to worship according to your own faith?</td>
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<tr>
<td>15. Are you able to work in such a way that there is a sense of accomplishment? (volunteer work, part-time work)</td>
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</table>
16. Are you able to play and participate in various forms of recreation?

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<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
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</table>

17. Are you able to learn, discover, and satisfy your curiosity?

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<th>Always</th>
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18. Are you able to use health facilities independently? (doctor's office, hospitals, clinics)

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<tr>
<th>Always</th>
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APPENDIX B

Quality of Life Index
For each of the following, please choose the answer that best describes how important that area of your life is to you. The first section is concerned with how important the idea is to you and the second section is concerned with how satisfied you are with the area at this time of your life. Please place a check mark (✓) in the blank under the most appropriate response.

<table>
<thead>
<tr>
<th></th>
<th>1. How important is your health?</th>
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<tr>
<td></td>
<td>2. How important is health care to you?</td>
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<td>3. How important is your physical independence (ability to do things for yourself, mobility)?</td>
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<td>4. How important is living a long time to you?</td>
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<td>5. How important is your family’s health? (immediate and/or extended)</td>
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<td>6. How important are your children?</td>
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<td>7. How important is your family’s happiness?</td>
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<td>8. How important is your relationship with your spouse/significant other/companion?</td>
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<td>9. How important is your sex life?</td>
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<td>10. How important are your friends to you?</td>
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<td>11. How important is emotional support to you?</td>
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<td>12. How important is meeting family responsibilities (things that you have to do for your family)?</td>
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<td>13. How important is being useful to others to you?</td>
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<td>14. How important is it to you to have a reasonable amount of stress or worries?</td>
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<td>15. How important is your home? (furniture, materialistic possessions)?</td>
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<td>16. How important is your neighborhood?</td>
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<td>17. How important is a good standard of living?</td>
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<td>18. How important are the overall conditions in the United States?</td>
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<td>Question</td>
<td>Very Important</td>
<td>Important</td>
<td>Not Important</td>
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<td>19. How important is your employment or volunteer work?</td>
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<td>20. (If unemployed, retired, or disabled), how important would it be to you to have a job?</td>
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<td>21. How important is your education?</td>
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<td>22. How important is your financial independence?</td>
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<td>23. How important are leisure time activities?</td>
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<td>24. How important is the ability to travel on vacations to you?</td>
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<td>25. How important is having a happy old age/retirement?</td>
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<td>26. How important is peace of mind?</td>
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<td>27. How important is your personal faith in God?</td>
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<td>28. How important is achieving your personal goals?</td>
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<td>29. How important is happiness to you?</td>
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<td>30. How important is it to you to be satisfied with life?</td>
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<td>31. How important is your personal appearance?</td>
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<td>32. How important are you to yourself?</td>
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<td>33. How satisfied are you with your health?</td>
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<td>34. How satisfied are you with the health care you are receiving?</td>
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<td>35. How satisfied are you with your physical independence (ability to do things for yourself, mobility)?</td>
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</table>
36. How satisfied are you with your potential to live a long time?

37. How satisfied are you with your family's health? (immediate and/or extended)

38. How satisfied are you with your children?

39. How satisfied are you with your family's happiness?

40. How satisfied are you with your relationship with your spouse/significant other/companion?

41. How satisfied are you with your sex life?

42. How satisfied are you with your friends?

43. How satisfied are you with emotional support you get from others?

44. How satisfied are you with your ability to meet family responsibilities (things you have to do for your family)?

45. How satisfied are you with your usefulness to others?

46. How satisfied are you with the amount of stress or worries in your life?

47. How satisfied are you with your home? (furniture, materialistic possessions)

48. How satisfied are you with your neighborhood?

49. How satisfied are you with your standard of living?

50. How satisfied are you with the overall conditions in the United States?

51. How satisfied are you with your employment or volunteer work?

52. (If unemployed, retired, or disabled), how satisfied are you with not having a job?
53. How satisfied are you with your education?

54. How satisfied are you with your financial independence?

55. How satisfied are you with leisure time activities?

56. How satisfied are you with your ability to travel on vacations?

57. How satisfied are you with your potential for a happy old age/retirement?

58. How satisfied are you with your peace of mind?

59. How satisfied are you with your personal faith in God?

60. How satisfied are you with your achievement of personal goals?

61. How satisfied are you with your life in general?

62. How satisfied are you with your happiness in general?

63. How satisfied are you with your personal appearance?

64. How satisfied are you with yourself in general?
APPENDIX C

Research Review Committee Approval
TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

PROSPECTUS FOR DISSERTATION

This prospectus proposed by: Ray Ann Hargrove-Hutte

________________________________________ and entitled:

Henderson's Nature of Nursing Theory and Quality of Life for the Older Adult

Has been read and approved by the members of (his/her) Research Committee.

This research is (check one):

X Is exempt from Human Subjects Review Committee review because this study meets the qualifications for Category I of the health and human services regulations incurring no risk to the subject.

_________ Requires Human Subjects Review Committee review because ____________________________________________

Research Committee:

Chairperson

Member

Member

Member

Member
APPENDIX D

Graduate School Permission Letter
Ray Ann Hargrove-Huttel  
P.O. Box 291  
Terrell, TX 75160  

Dear Mrs. Hargrove-Huttel:  

I have received and approved the Prospectus for your research project. Best wishes to you in the research and writing of your project.  

Sincerely yours,  

Leslie M. Thompson  
Dean  

LMT:ccw  

xc: Dr. Anne Gudmundsen  
Dr. Helen A. Bush
APPENDIX E

Explanation of Study
Explanation to Subjects

Hello, my name is Ray Ann Hargrove-Huttel. I am a registered nurse and am currently a doctoral student majoring in nursing at Texas Woman's University in Denton, Texas. The opinionnaire you will be completing will assist me in obtaining information concerning your quality of life. The information will be used to assist nurses in learning how to best help people age successfully.

Your participation in this study is voluntary and you have the right to withdraw participation at any time. In order for you to remain anonymous, please do not place your name anywhere on the opinionnaire. If you would like to receive a copy of the results of this study, please complete the request form at the front table and place in the designated box. If you have any questions, please do not hesitate to ask for further information. Thank you for your time and effort in completing this opinionnaire.
APPENDIX F

Demographic Data Form
COMPLETION AND RETURN OF THIS OPINIONNAIRE IS CONSTRUED AS YOUR INFORMED CONSENT TO ACT AS A SUBJECT IN THIS STUDY

Demographic Data

Other than giving your present age, please place a check mark ( ) beside the most appropriate response to the remaining questions. Thank you for your participation in completing this opinionnaire.

_____ Male
_____ Female
_____ Age

Living Status:
_____ Lives alone
_____ Lives with spouse
_____ Lives with family
_____ Lives with other

Health Status:
_____ Excellent
_____ Good
_____ Fair
_____ Poor

Yearly Income:
_____ 0 to $10,000
_____ $10,001 to $20,000
_____ $20,001 to $30,000
_____ more than $30,001
APPENDIX G

Permission to Use Quality of Life Index
November 14, 1986

Ms. Ray Ann Hargrove-Huttel  
P.O. Box 291  
Terrel, Texas 75160

Dear Ms. Hargrove-Huttel:

Thank you for your interest in the Quality of Life Index (QLI). I have enclosed the generic version of the QLI and the computer program for calculating scores. I have also included a list of the weighted items that are used for each of four subscales: health and functioning, socioeconomic, psychological/spiritual, and family, as well as the computer commands used to calculate the subscale scores and overall scores.

In return of our permission to use the QLI, I would appreciate it if you would send me the raw data from the QLI and sociodemographic information for psychometric purposes.

If I can be of further assistance, please do not hesitate to contact me.

Sincerely,

Marjorie J. Powers, PhD  
Professor and Head  
MJP/vmd  
Enclosures